# FINAL

# **DECISION NOTICE &**

# FINDING OF NO SIGNIFICANT IMPACT

Thomas Creek Restoration Project

USDA Forest Service, Umatilla National Forest,
Walla Walla Ranger District
Umatilla and Union Counties, Oregon

T 1 N, R 37 E; sections 1, 2, 12

T 1 N, R 38 E; sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

T 2 N, R 37 E; sections 12, 13, 14, 15, 22, 23, 24, 25, 26, 36

T 2 N, R 38 E; sections 12, 13, 14, 15, 22, 23, 24, 25, 26, 36

Willamette Meridian

#### Introduction

This Decision Notice documents my decision and rationale for selecting a course of action to be implemented for the Thomas Creek Restoration Project. The Thomas Creek Restoration Project Environmental Assessment (EA) documents the analysis of the proposed action and Alternatives. My decision is based on my review of the EA, the project file, and the public involvement process for this project.

#### Background

The Thomas Creek Restoration Project (Thomas Creek project) area is located in the southern portion of the Walla Walla Ranger District, about six miles northwest of Elgin, Oregon, 25 miles east of Mission, Oregon, and 11 miles east of the Umatilla Indian Reservation boundary. The project area is approximately 15,800 acres and is composed of moist and dry upland forest (EA at 6, 108-111). The project area has been affected by past timber harvest, grazing, fire suppression, and road building. Actions including selective logging, artificial reforestation, removal of wood from streams, and placement of fish barriers have influenced the condition of the landscape today (EA at 6).

Plantations established in the late 1950's and early 1960's with off-site ponderosa pine occupy about 1,000 acres of the project area. Pines within these historic plantations tend to have relatively low vigor, broken tops, and a highly branched and stunted form. Another 1,000 acres of harvested lands within the project area were shelterwoods or other treatments implemented in the 1970's and 1980's. These are stocked with

a variety of tree sizes ranging from seedling/sapling to larger overstory trees. Approximately another 1,300 acres within the project area are stands that were regenerated in even aged stands starting in the 1980's. These more recently planted stands are now stocked with sapling and pole sized trees.

The purpose of the Thomas Creek project is to improve landscape resiliency and restore functions and processes in upland forest by moving the landscape's vegetation toward Range of Variation (RV) in forest structure, density, and species composition; restore Riparian Habitat Conservation Areas (RHCAs) altered by past timber harvest and off-site planting by managing towards PACFISH Riparian Management Objectives; and to provide forest products to assist in meeting local and regional social, cultural and economic needs. Specific needs for the Thomas Creek project area are stated on page 8 of the EA and are as follows:

- Decrease off-site ponderosa pine in both upland and riparian areas;
- Increase western larch and change conifer species composition in riparian areas where ecologically appropriate;
- Restore native vegetation diversity in riparian areas for the long term by:
  - o Removal of off-site ponderosa pine within Riparian Habitat Conservation Areas;
  - o Regeneration of site-appropriate native hardwood and conifer species (i.e. grand fir and cottonwood plant associations);
  - o Planting of local native conifers and hardwoods where appropriate.
- Decrease high density upland forest;
- Decrease density in riparian areas to meet restoration objectives;
- Decrease multi-strata forest;
- Ameliorate detrimental soil conditions;
- Improving pool frequency, large woody debris, width/depth ratios and water temperature through:
  - o Placement of large woody debris in streams;
  - o Planting or otherwise encouraging growth of stream shading vegetation in those areas, where it has been reduced by past activities.

The EA documents the analysis of four action Alternatives to address these needs.

#### **Decision**

Based upon my review of the EA, project file, public comments received, and the objection received on the Draft Decision Notice and Finding of No Significant Impact (FONSI), I have decided to implement Alternative B, as modified (referred to throughout this document as Alternative B-Modified, or the Selected Action). Alternative B-Modified is within the scope of analysis for Alternative B with changes listed in Table 2 on pages 5-6 below. The Selected Action will implement all actions listed under Alternative B on pages 14-24 of the final EA, with the modifications listed below.

#### Modifications to Alternative B

Based on the objections received by the Forest, I have decided to make modifications to Alternative B in

order to address concerns the objector had about the Project. These modifications include changes to commercial and non-commercial treatments within Riparian Habitat Conservation Areas (RHCAs), treatments within Other Undeveloped Lands (OUL), and treatment of old trees as follows:

- 1. All non-commercial treatment within RHCAs will have a 9 inch diameter limit (493 acres).
- 2. All commercial treatment within RHCAs will have a 17 inch diameter limit (104 acres).
- 3. In Class 4 RHCAs, a 15 foot no cut buffer, or the "inner gorge" (EA at 39, 45, 71), whichever is greater, will be applied (44 acres).
- 4. Units designated for "intermediate-commercial" thinning prescriptions (EA Appendix A, page A-1-A-3) within RHCAs will change to "non-commercial" thinning prescriptions within RHCAs (32 acres). See Table 1.

Table 1: Alternative B-Modified Intermediate-Commercial to Non-Commercial RHCA Treatments

Total Acres:			32		
92	117	Intermediate-Commercial	Non-Commercial	6	4
60*	6	Intermediate-Commercial	Non-Commercial	2 (DROPPED)	3
58	18	Intermediate-Commercial	Non-Commercial	5	4
52	49	Intermediate-Commercial	Non-Commercial	5	4
51	31	Intermediate-Commercial	Non-Commercial	3	4
49	20	Intermediate-Commercial	Non-Commercial	1	4
47	61	Intermediate-Commercial	Non-Commercial	12	4
			Treatment		Class
Unit	Acres	Alt B RHCA Treatment	Alt B-Modified RHCA	RHCA Acres	RHCA

<sup>\*</sup>Unit 60: 2 acres of RHCA treatments were dropped due to overlap with old trees. See Unit 60 below.

Application of "Silvicultural Prescription Information Common to Riparian Habitat Conservation Areas (RHCAs)" document. See Attachment 2 page 23-26.

5. Other Undeveloped Lands (OUL) identified within Alternative B will not be treated, either commercially or non-commercially. These areas are designated non-forest or have been identified as open and void of trees (158 acres).

Unit 2: Alternative B proposes 9 acres of commercial treatment in this unit (4 ac upland, 5 ac Class 4 RHCA).

*Modification:* My decision will eliminate all activities, as described in Alternative B, from the portion of the unit that lies west of the creek (1 acre of upland dropped). All snags greater than 12 inches diameter will be retained (from EA at 47).

Unit 9: Alternative B proposes 48 acres of commercial treatment (46 ac upland, 2 ac Class 4 RHCA).

*Modification:* My decision will retain a leave strip along the southwest boundary of unit which includes the RHCA and old trees. This will result in 4 acres upland and 2 acres of Class 4 RHCA dropped.

Unit 16A/16B: 16A: Alternative B proposes 20 acres of commercial treatment (20 acres upland).

16B: Alternative B proposes 10 acres of commercial treatment (5 acres Class 3 RHCA, 5 acres Class 4 RHCA).

Modification: See Attachment 3 for Unit 16A/16B modified unit boundary map (page 27). My

- decision will eliminate all activities, as described in Alternative B, from the portions of the units identified as dropped in the modified unit boundary map resulting in 4 acres upland dropped (16A) and 1 acre Class 3 RHCA and 4 acres Class 4 RHCA are dropped (16B).
- Unit 18: Alternative B proposes 11 acres of commercial treatment (6 acres upland, 5 acres Class 4 RHCA).
  Modification: My decision will eliminate all activities, as described in Alternative B, from the northwest portion of the unit on the west side of stream (1 acre of upland and 1 acre Class 4 dropped). An east-west connectivity corridor will be retained along the northern tip of unit. Canopy cover will not be reduced below 70 percent in the northern portion of unit (From EA at 47-48).
- **Unit 20:** Alternative B proposes 10 acres of commercial treatment (8 acres upland, 1 acre Class 3 RHCA, 1 acre Class 4 RHCA).
  - *Modification:* My decision will eliminate all activities, as described in Alternative B, for all RHCAs (1 acre Class 3, 1 acre Class 4 dropped).
- **Unit 26:** Alternative B proposes 15 acres of commercial treatment (13 acres upland, 1 acre Class 3 RHCA, 1 acre Class 4 RHCA).
  - Modification: My decision will eliminate all activities, as described in Alternative B, from the northwest corner of the unit (1 acre Class 4 RHCA dropped).
- Unit 31: Alternative B proposes 11 acres of commercial treatment (7 acres upland, 4 acres Class 4 RHCA).
  Modification: My decision will eliminate all activities, as described in Alternative B, in the southern portion of the unit that overlaps with the RHCA (1 acre upland and 4 acres Class 4 RHCA dropped).
- Unit 34: Alternative B proposes 17 acres of commercial treatment (9 acres upland, 8 acres Class 4 RHCA).
  Modification: My decision will eliminate all activities, as described in Alternative B, for the western portion of unit with old trees on west side of creek (3 acres upland, 1 acre Class 4 dropped).
- Unit 39: Alternative B proposes 14 acres of commercial treatment (13 acres upland, 1 acre Class 4 RHCA).
  Modification: My decision will eliminate all activities, as described in Alternative B, for this unit (14 acres dropped).
- **Unit 42:** Alternative B proposes 29 acres of commercial treatment (20 acres upland, 9 acres Class 4 RHCA). *Modification:* My decision will eliminate all activities, as described in Alternative B, for the portion of unit south and west of the RHCA (3 acres Class 4 dropped).
- Unit 45: Alternative B proposes 16 acres of commercial treatment (13 acres upland, 3 acres Class 4 RHCA). *Modification:* My decision will eliminate all activities, as described in Alternative B, within the RHCA (3 acres Class 4 dropped).
- Unit 47: Alternative B proposes 61 acres of commercial treatment (49 acres upland, 12 acres Class 4 RHCA).
  - Modification: My decision will eliminate all activities, as described in Alternative B, for the northern finger of the unit (3 acres upland, 3 acres Class 4 dropped). Remaining RHCA treatments will move from intermediate-commercial to non-commercial with a 9 inch diameter limit (9 acres

Class 4).

Unit 60: Alternative B proposes 6 acres of commercial treatment (4 acres upland, 2 acres Class 3 RHCA).

Modification: My decision will eliminate all activities, as described in Alternative B, within the

RHCA (2 acres Class 3 dropped).

**Unit 61:** Alternative B proposes 76 acres of non-commercial treatment (43 acres upland, 18 acres Class 3, 15 acres Class 4 RHCA).

*Modification:* My decision is to extend the no treatment stream buffer out to 75 feet within the Class 3 RHCA (9 acres Class 3 no treatment).

**Unit 122:** Alternative B proposes 12 acres of non-commercial treatment (4 acres upland, 4 acres Class 4 RHCA).

*Modification:* My decision will eliminate all activities, as described in Alternative B, that overlap with other undeveloped lands (6 acres upland, 2 acres Class 4 RHCA dropped).

The Selected Action includes all project design features (PDFs) and Best Management Practices (BMPs) listed in Chapter 2 of the EA, Tables 2.5- 2.11. The PDFs and BMPs that were developed reflect existing direction found in the Umatilla National Forest Land and Resource Management Plan and program direction established on the Forest. Activities and their effects, including the implementation of PDFs and BMPs, will be monitored by the Forest Service as described on page 50 of the EA.

Table 2 summarizes the activities and outcomes included in my decision (Alternative B- Modified) in comparison with Alternative B.

Table 2. Activities authorized under Selected Action (Alternative B-Modified).

Activity	Alternative B	Selected Action (Alternative B- Modified)
Silvicultural Treatments (Ac	cres)	
Seedtree	97	87
Group Shelterwood	240	231
Shelterwood	90	80
Variable Density- Regen	306	294
Variable Density	181	139
Riparian Restoration (Class III RHCA's)*	28	19
Intermediate- commercial	328	259
Intermediate- NCT**	238	223
NCT**	1,037	1,089
Total commercial treatment	1,270	1,109
Total non-commercial treatment	1,276	1,312
Total historic ponderosa pine plantation treated	942	895

	Activity	Alternative B	Selected Action (Alternative B- Modified)	
Vegetation	Treatments in Riparian Habitat Conservation A	reas (Acres)		
Class I (non-commercial)		172	172	
Class III (commercial)*		28	19	
Class III (non-commerci	ial)	101	101	
Class IV(commercial)		155	81	
Class IV (non-commerc	ial)	234	220	
Total commercial RHCA	A treatments	183	104	
Total non-commercial R	RHCA treatments	507	493	
orastralia en	Logging Systems (Acres)		Soft Her House, the	
Forwarder		374	371	
Tractor	71	765	721	
Skyline		132	122	
	Other Restoration Activities (Acres)			
Subsoiling		400	400	
Large woody debris pla	cement	158	158	
Riparian planting		158	158	
	Fuels Treatments (Acres)			
	Lop and scatter	1,276	1,321	
Hand	Hand pile	38	27	
26-1	Landing pile	923	884	
Mechanical	Grapple pile	347	345	
	Pile burn hand and grapple piles	385	352	
	Pile burn landing piles	923	863	
Prescribed Fire	Jack-pot burn	305	286	
	Broadcast burn	122	115	
	Landscape burn	982	982	
	Transportation and Access (Miles)			
Maintenance Level 1 ro	ads used for haul	14	13.6	
Maintenance Level 2 ro	ads used for haul	24	24	
Maintenance Level 3-4	roads used for haul	3	3	
Maintenance Level 5 ro	ads used for haul	4	4	
Newly constructed temp	porary roads	1	1	
Temporary roads constr	ructed on existing template	0.5	0.5	
	19 acres) is same as Class III commercial only, no mechanized equipment			

#### Reasons for the Decision

I have reviewed the Thomas Creek Restoration Project EA, information in the analysis file, and the public comments and objections received on the project. In addition, I have reviewed the Forest Plan, and applicable laws and regulations. I have determined that there is adequate information to make a reasoned choice among the Alternatives.

I believe there is an immediate need for restoration activities within the Thomas Creek project area. Past harvest activities have left old plantations with off-site ponderosa pine that are struggling to survive. Range of variability (RV) analysis shows forest density, species composition, and stand structure are outside the range considered resilient in the long term. Past harvest methods have left some old harvest units with detrimental soil condition (DSC) greater than 20%, which is above Forest Plan standards. Some streams in the area have pool frequency and large woody debris levels that are below desired conditions.

We have worked closely with tribes and interested publics including the Umatilla Forest Collaborative Group (UFCG), to better understand opportunities, issues and concerns within the project area. I asked the interdisciplinary team to listen to our interested public, identify and evaluate issues and Alternatives. I believe the Thomas Creek Restoration Project Environmental Assessment captures that hard look.

In making the decision, I considered how each Alternative addresses the stated purpose and need and complies with the Forest Plan, and applicable laws, regulations, and policies. I have also considered how each Alternative responds to the issues identified, the public and agency comments submitted in response to scoping and the 30-day comment period, and the objection resolution process. I recognize that some members of the public were very passionate about what they feel is best for the land, but in considering all the issues and comments and objections received I find that there is no single management strategy that could totally satisfy all concerns that were expressed about the Thomas Creek project. In consideration of how well the Alternatives respond to the purpose and need, issues, concerns, and objections, I have concluded that Alternative B-Modified provides the most balanced approach for management within the Thomas Creek project area at this time, while taking measures to protect soil, water, streamside shade, and maintaining appropriate levels of habitat for various wildlife species.

# Response to Purpose and Need

I find that Alternative B-modified best addresses the Thomas Creek project purpose and need of restoring historic ponderosa pine plantations as stated on pages 8-9 of the EA. Alternative B-Modified was developed to directly respond to the purpose and need (as stated above), and actions proposed under this Alternative as modified would restore the most acres of historic ponderosa pine plantations when compared to Alternative C and D (EA at 14-24 and 33-34) and restore Riparian Habitat Conservation Areas (RHCAs). Alternatives C and D address the purpose and need of the Thomas Creek project, but were developed to also address issues raised during scoping (EA at 11-12), resulting in reduced acres of historic ponderosa pine plantations proposed for restoration treatments in these Alternatives. Alternative E also meets the purpose and need of restoring historic ponderosa pine plantations and RHCAs, but was developed to respond to the key issue of economics, and resulted in trade-offs when considering the effect of the project on resources and other key issues. I find that all of the action Alternatives (Alternatives B, B-Modified, C, D, and E) address the project objectives but have varying effects and tradeoffs (see EA, Chapter 3 Affected Environment and Environmental Effects) that I considered in making my decision.

In making my decision, I considered the potential outcome to this area if I had selected Alternative A, no

action. I find that the no action Alternative fell short of addressing the purpose and need for action (EA at 13) and it would leave the Thomas Creek project area on an undesirable trajectory away from it historic forest structure, species composition, and density. I conclude that by acting now, by treating stands to modify structure, species composition, and density, future stand conditions and habitat conditions within the Thomas Creek project area would improve, and therefore address the purpose and need for action.

In the section below, I will outline the rationale for my decision based on how the Selected Action (Alternative B-Modified) best meets the overall purpose of the project and specific needs in the project area, followed by how the Selected Alternative best responds to the key issues identified for the project.

**Purpose:** Improve landscape resiliency and restore functions and processes in upland forest by moving the landscape's vegetation toward Range of Variation (RV) in forest structure, density, and species composition

Need: Decrease off-site ponderosa pine in upland and riparian areas- Of the action Alternatives, Alternative B-Modified and Alternative E treat the greatest number of acres in historic ponderosa pine plantations (942 acres). Alternatives B and E also treat approximately 183 acres of RHCAs by commercial treatment, and approximately 507 acres non-commercially (see EA at 17, 31 and 33). Alternative B-Modified treats approximately 104 acres of RHCAs by commercial treatment, and approximately 493 acres non-commercially (see Table 2 pages 5-6 above). Alternative C and D would treat fewer acres in historic ponderosa plantations and in RHCAs (EA at 33-34) than Alternative B and E but slightly more than Alternative B-Modified.

When considering the range of Alternatives, I believe Alternative B-Modified is an appropriate choice to meet the specific need of decreasing off-site ponderosa pine in upland and riparian areas within the Thomas Creek project area because it treats the most acres in historic ponderosa pine plantations that are proposed in the action Alternatives, and treats RHCA acres while balancing issues identified during the planning process and through the objection resolution process (see Response to Issues section below).

Need: Decrease high density forest in upland and riparian areas- Commercial and non-commercial vegetation treatments are designed to reduce stand density in the project area. Of the action Alternatives, Alternative E would treat the most acres (3,069 acres or about 19% of the project area) followed by Alternative C (2,600 acres or about 16% of the project area). However, both of these Alternatives propose treatments outside of historic ponderosa pine plantations. Of the Alternatives that propose vegetation treatments within areas that were previously harvested, Alternative B (2,546) and Alternative B-Modified (2,429 acres) proposes slightly more acres of treatment than Alternative D (2,417 acres). In addition, all the action Alternatives propose 982 acres of landscape burning.

The range of variation (RV) analysis completed for the Thomas Creek project shows that Alternative B would move approximately 12% of the landscape within the analysis area towards RV values for forest density (EA at 118). Alternative E would move about an additional 2% of the landscape within the analysis area towards RV values (EA at 121). While Alternative E would decrease the most high density forest in the Thomas Creek project area, I believe that Alternative B-Modified would also accomplish the need to reduce forest density in both upland and riparian areas, while focusing on the need to restore historic ponderosa pine plantations and areas with past harvest and respond to issues raised during the objection process.

Need: Decrease multi-strata forest- The results of the Thomas Creek RV analysis are indicative of the

relative productivity of the analysis area and the lack of disturbances that create single layered forest stands. All structural states that include only multiple canopy layers are currently overrepresented and all structural stages that include only one canopy layer are currently underrepresented (EA at 110).

Alternative B-Modified would decrease multi-strata forest (understory reinitiation) resulting in increases in single-strata forest (EA at 117). Alternative B-Modified does not propose to treat any old forest multi-strata or old forest single-strata stands, because proposed treatments are limited to the historic ponderosa pine plantations and areas of other past harvest. Alternative C would result in similar effects as Alternative B-Modified, however approximately 137 acres of upland forest outside of previously harvested stands would be treated to move structure towards RV values (EA at 119). Alternative D would have similar effects of Alternative B-Modified, however there would be approximately 100 less acres of historic ponderosa pine stands moved toward RV values (EA at 120). Alternative E would result in similar effects as Alternative B-Modified, however approximately 522 acres of upland forest outside of previously harvested stands would be treated to move structure towards RV values (EA at 121). I believe that Alternative B-Modified would best accomplish the need to decrease multi-strata forest while focusing on the need to restore historic ponderosa pine plantations and areas with past harvest while addressing issues raised during the objection process.

*Need:* Ameliorate detrimental soil conditions- Past management has created detrimental soil conditions (DSC) which are affecting the productivity of some stands within the Thomas Creek project area. The no action Alternative would not treat any existing detrimental soil conditions. These areas will continue to recover over time though natural processes. Alternative B-Modified would accomplish subsoiling activities within historic ponderosa pine plantations to restore soil tilth and productivity where existing DSC is 20%. It is estimated that approximately 400 acres will need treatment.

**Purpose:** Restore Riparian Habitat Conservation Areas (RHCAs) altered by past timber harvest and offsite planting by managing towards PACFISH Riparian Management Objectives

Need: Increase western larch and change conifer species composition in riparian areas where ecologically appropriate- For riparian vegetation treatments, many of the old harvest units have the off-site ponderosa pine as the primary species within the riparian areas (EA at 7 and 16). In addition, within the younger plantations the hardwood component is deficient due to over competition from more vigorous conifer species. Ecologically appropriate commercial treatment of off-site ponderosa pine within riparian areas is proposed for Alternatives B, B-Modified, C and E. Alternatives B and E propose slightly greater number of commercial treatment acres (183 acres) than Alternative C (150 acres) and Alternative B-Modified (104 acres). These treatments would also favor leaving native tree species, resulting in moving these acres towards a more desired species composition. Alternative D proposes only non-commercial thinning in the old harvest units that have the off-site ponderosa pine. This treatment would be less effective in changing the conifer species composition than the other action Alternatives because of restrictions on the type of material that could be removed. Riparian and adjacent forests would remain over dense and dominated by off-site ponderosa pine, leaving little opportunity for riparian and adjacent upland forest restoration.

All of the action Alternatives propose ecologically appropriate non-commercial treatments in riparian areas to promote changing the conifer species composition towards site-specific desired conditions. The number of acres within historic ponderosa pine plantations is similar for all Alternatives (ranging from 836 acres to 942 acres). To respond to issues identified during scoping (see Response to Issues section below), Alternative D proposes about 100 more acres of non-commercial thinning than the other action Alternatives

because some of the old harvest units that have the off-site ponderosa pine are proposed for non-commercial thinning in this Alternative, rather than proposed as commercial treatment in Alternatives B, B-Modified, C and E. While Alternatives B and E are identical in terms of the numbers of acres treated in RHCAs, I believe Alternative B-Modified is a more appropriate choice when considered the tradeoffs between issues identified below.

*Need:* Restore native vegetation diversity in riparian areas for the long term- Many of the old harvest units have off-site ponderosa pine as the primary species within riparian areas. Commercial treatment of off-site ponderosa pine within riparian areas is proposed for Alternatives B, B-Modified, C and E. Alternatives B and E (183 acres) propose slightly greater number of treatment acres than Alternative C (150 acres) and Alternative B-Modified (104 acres). Alternative D would propose non-commercial thinning for a lesser amount of acres in some of these old harvest units that have the off-site ponderosa pine. This treatment would be least effective in decreasing off-site ponderosa pine within RHCAs.

Commercial treatment within RHCAs that were altered by past timber harvest and planting of offsite ponderosa pine is proposed for Alternatives B, B-Modified, C and E. These commercial treatments will create restoration opportunities for site-appropriate native hardwood and conifer species. Alternatives B and E (183 acres) propose slightly greater number of treatment acres than Alternative C (150 acres) and Alternative B-Modified (104 acres). Alternative D would propose non-commercial thinning for a lesser amount of acres in some of these old harvest units that have the off-site ponderosa pine. This treatment would be least effective in decreasing off-site ponderosa pine within RHCAs.

All the action Alternatives propose 158 acres of riparian planting of native conifers and hardwoods. Alternative B-Modified would implement planting on these 158 acres.

Need: Improve pool frequency, large woody debris, width/depth ratios and water temperature through placement of large woody debris in streams and planting of stream shading vegetation. All of the action Alternatives propose 158 acres of planting of hardwoods and native conifers and placement of large woody debris within RHCAs that would improve pool frequency and large woody debris recruitment through large wood placement. Alternative B-Modified would accomplish this. Hardwood and conifer release are expected to occur during the short term (1-5 years), while hardwood and conifer plantings are expected to take longer to become established and begin to provide effective shade (5-10 years). The net result would be an increase in near-stream shade.

The critical season for stream shading for water quality and fish is July and August. Alternative B-Modified proposes commercial restoration treatment in 19 acres of Class III streams and non-commercial restoration treatment in 273 acres of Class I and III streams (See Table 2 pages 5-7). Alternatives B and E propose commercial restoration treatment in 28 acres of Class III stream and non-commercial restoration treatment in 273 acres of Class I and III streams (See page 33, EA). Alternative C proposes 272 acres of non-commercial treatment within Class I and III streams. Alternative D proposes 236 acres of non-commercial treatment within Class I and III streams. These treatments are designed to be outside the shade producing areas (EA at 71).

**Purpose:** Provide forest products to assist in meeting local and regional social, cultural, and economic needs.

Each of the action Alternatives will produce forest products to assist in meeting the local and regional needs (EA at 199-202). Commercial timber outputs of action Alternatives are (EA at 201, Table 3.84): Alternative

B would produce approximately 5,841 MBF; Alternative B-Modified would produce approximately 5,673 MBF; Alternative C would produce approximately 5,771 MBF; Alternative D would produce approximately 4,731; and Alternative E would produce approximately 7,413 MBF. Alternative E would have the greatest contribution towards meeting local and regional economic needs. Alternative B-Modified provides a slightly less contribution than Alternatives B and C but does not require the trade-offs between the issues of old forest and access management (discussed below) while addressing the issues raised during the objection process.

# Response to Issues

In making the decision to select Alternative B-Modified, I also considered how each Alternative responds to resources and the comments received during the scoping, two 30 day review and comment periods, and resolving the objections over the project. I observed that the environmental effects disclosed in Chapter 3 for many resource topics did not vary by Alternative or only in minor ways and that the intensity of the predicted effects may be limited in time or extent, or may be minimal altogether. Because of this, those resource issues influenced my decision in minor ways and are not discussed in detail in this decision document. Issues that influenced my decision are addressed individually below.

Old Trees: Proposed activities may reduce the abundance of trees over 150 years old- During project development, scoping, and the objection period, some commenters and objectors expressed concern for proposed activities outside of historic ponderosa pine plantations because old trees (greater than 150 years old) may be affected. Alternatives B, B-Modified, and D do not propose treatments that would reduce the abundance of trees over 150 years old because commercial harvest and non-commercial thinning activities are only proposed within historic ponderosa pine plantations and areas with past harvest. Alternative C proposes treatments on 132 acres in stands with old trees, and Alternative D proposes treatments on 522 acres in stands with old trees.

Harvesting acres outside of historic ponderosa pine plantations would move the landscape towards RV values for forest structure, species composition and stand density by approximately 2% more than Alternative B-Modified (EA at 120). I believe that Alternative B-Modified best responds to the purpose and need while balancing the issue of harvest of old trees, and builds on consensus work accomplished by the UFCG and agreement during the objection resolution process.

Access: Proposed use of temporary roads and re-opening of closed Forest system roads may cause soil erosion and compaction, contribute sediment to streams and disturb wildlife- Alternative D does not propose any temporary roads. Alternatives B, B-Modified, C, and E propose approximately 1.5 miles of temporary roads. These roads would be obliterated after use (EA at 21). Approximately 0.5 miles of those temporary roads are on an existing road template that is not currently part of Forest road system. The Thomas Creek project would obliterate those existing roads, thereby reducing the amount of DSC on the landscape below current conditions (EA at 59). Alternative B-Modified would allow for the greatest amount of soil restoration, and balance the issues of jobs/economics, and old trees.

Alternative E would use the most closed system roads (19 miles), followed by Alternative B (14 miles), Alternative B-Modified (13.6 miles) then Alternative C (13 miles). Alternative D (10 miles) would need the least number of closed system roads (EA at 21 and 34). By choosing Alternative B-Modified, the risk of increased erosion and sediment delivery from the use of closed roads is reduced when compared to Alternative E (EA at 59).

Jobs/Economics: Proposed activities may contribute to the local economy- For the action Alternatives the effects of each Alternative was measured by "Present net value of timber harvest"; "Number of jobs created/maintained"; and, "Stumpage" (EA at 199-202). Table 3.84 in the EA displays the effects. Alternative B is the second highest producer of harvest revenue when compared to Alternative E. Because Alternative B-Modified also responds to the other issues of old forest and access management, I believe implementing Alternative B-Modified is the most appropriate choice for the Thomas Creek project area.

Learning Design: Including a learning design could contribute to information about historic plantation management, edge management, and hardwoods in historic plantations- Alternative C was responsive to this issue. This was developed in response to comments received from the Umatilla Forest Collaborative Group (UFCG) and others during the project scoping process (EA at 11-12). The "Learning Design" was developed by lead scientist and author B.T. Bormann (PNW Research Station) and others. The Learning Design is incorporated fully into Alternative C. The other Alternatives do not incorporate the Learning Design.

Although the UFCG proposed the Learning Design during the scoping process for the Thomas Creek project, members of the collaborative later rejected some of the methodologies the design was proposing. In particular, the UFCG could not come to consensus on treatments outside historic ponderosa pine plantations and later agreed to not support the Learning Design concept within the Thomas Creek project. The disagreement within the UFCG around treatments outside of historic ponderosa pine plantations and areas with past harvest contributed to lack of consensus within the group around treatments in old forest. During the public process, the UFCG reached consensus around the proposals in Alternative B and reached agreement with the objector on Alternative B-Modified. For this reason, I believe Alternative B-Modified is the most appropriate choice in light of concerns from the public.

Restoration of Riparian Habitat Conservation Areas- Non-commercial and commercial treatment in RHCAs could contribute to restoration goals by reducing off-site ponderosa pine and increasing desired riparian vegetation. Treatments could also cause short term soil erosion, sedimentation and reduction of shade- The effects of each Alternative was measured by acres of RHCA restoration with non-commercial harvest and acres with RHCA restoration with commercial harvest. Alternative B-Modified proposes 104 acres of commercial restoration treatments, Alternatives B and E propose 183 acres of commercial restoration treatments, while Alternative C proposes 150 acres of treatment. Alternative D would does not propose any commercial restoration treatments.

Alternative D proposes 606 acres of non-commercial restoration treatments, while each of the other action Alternatives propose roughly 500 acres of non-commercial restoration treatments. Alternative D has about 100 acres more proposed as non-commercial thinning than the other Alternatives, because the other Alternatives are treating old harvest units that have the off-site ponderosa pine by commercial treatments. The non-commercial treatment in these stands in Alternative D is the least effective treatment method in decreasing off-site ponderosa pine within RHCAs.

When compared to Alternative C and D, Alternative B-Modified is the most responsive to the issues of old forest and access management and objection issues raised while still accomplishing restoration in RHCAs; consequently, I believe it is the most appropriate Alternative to implement for the Thomas Creek project.

#### **Other Alternatives Considered**

In addition to the Selected Action (Alternative B-Modified as described above), I considered six other Alternatives: the no action Alternative, four action Alternatives that were considered in detail (Alternatives

B, C, D, and E) and one Alternative that was considered and dropped from detailed study (EA at 36). Alternatives are described in full detail in the EA on pages 13-35.

The four action Alternatives considered in detail in the EA examine varying combinations and degrees of vegetative treatments and were developed to address the purpose and need and to respond to key issues identified in scoping, as described above and in EA Chapter 2 (EA at 11-12). The following is a summary of the Alternatives that were considered in detail.

# Alternatives Considered in Detail

Alternative A - No Action- Under the No Action Alternative, current management plans would continue to guide management of the project area (EA at 13).

Action Alternative B- Alternative B (EA at 14-24) was presented in the Draft EA as the Proposed Action. Alternative B is designed to address the purpose and need of the project by increasing resiliency of the landscape by managing toward range of variation, ameliorate detrimental soil conditions, managing RHCAs, and providing forest products for economic, social, and cultural needs. Alternative B includes approximately 1,270 acres of commercial treatments and would restore 942 acres of historic ponderosa pine plantations. Approximately 1,276 acres of non-commercial thinning would also occur. Alternative B would treat approximately 183 acres of Class III and Class IV RHCAs by commercial means. Approximately 507 acres of Class I, III, and IV RHCAs would be treated non-commercially. In Alternative B, approximately 1.5 miles of temporary roads would be constructed and obliterated after project implementation, and approximately 14 miles of Maintenance Level 1 roads would be used.

Action Alternatives C, D, and E- Alternative C (EA at 25-26) was developed to meet the purpose and need for action, and to address the key issue of including a learning design to contribute to information about historic ponderosa pine plantations, edge management, and hardwoods. Alternative C includes approximately 1,330 acres of commercial treatments, and would restore 870 acres of historic ponderosa pine plantations. Approximately 1,270 acres of non-commercial thinning would also occur. Alternative C would treat approximately 150 acres of Class III and Class IV RHCAs by commercial means. Approximately 505 acres of Class I, III, and IV RHCAs would be treated non-commercially. Under Alternative C, approximately 1.5 miles of temporary roads would be constructed and obliterated after project implementation, and approximately 13 miles of Maintenance Level 1 roads would be used.

Alternative D (EA at 29-30) was developed to meet the purpose and need, and address the key issues of access management, removal of trees more than 150 years old, and commercial vegetation treatments in RHCAs. Alternative D includes approximately 949 acres of commercial treatments, and would restore 836 acres of historic ponderosa pine plantations. Approximately 1,468 acres of non-commercial thinning would also occur. Alternative D would treat not Class III and Class IV RHCAs by commercial means. Approximately 606 acres of Class I, III, and IV RHCAs would be treated non-commercially. Under Alternative D, approximately 10 miles of Maintenance Level 1 roads would be used. No temporary roads would be constructed for project implementation.

Alternative E (EA at 30-31) was developed to meet the purpose and need, and address the key issues of jobs and economics. Alternative E includes approximately 1,793 acres of commercial treatments, and would restore 942 acres of historic ponderosa pine plantations. Approximately 1,276 acres of non-commercial thinning would also occur. Alternative E would treat approximately 183 acres of Class III and Class IV RHCAs by commercial means. Approximately 507 acres of Class I, III, and IV RHCAs would be treated

non-commercially. In Alternative E, approximately 1.5 miles of temporary roads would be constructed and obliterated after project implementation, and approximately 19 miles of Maintenance Level 1 roads would be used.

Under all action Alternatives, approximately 982 acres are proposed for landscape prescribed burning. Additionally, 158 acres of large woody debris placement and riparian planting would occur, and 400 acres of subsoiling would occur. Other connected actions, such as activity fuels treatments, noxious weeds treatment and prevention, and temporary road rehabilitation are also proposed under all action Alternatives. See EA, Table 2.3 (EA at 33-34) for full comparison of action Alternatives.

Alternative Considered but Eliminated from Detailed Study- In addition to the action Alternatives described above, an Alternative that only used open Forest system roads was considered to respond to the key issue of access management. This Alternative would not have proposed to re-open or reconstruct any closed roads for project implementation. Under this Alternative, 729 acres of commercial vegetation treatments would not have been proposed, as compared to Alternative B. This represents a 57% reduction in restoration work that would be achieved. I worked with the interdisciplinary team and determined that this Alternative would not treat enough of the historic ponderosa pine plantations to meet the purpose and need of moving the landscape towards RV, and therefore did not carry the Alternative forward for detailed analysis (see EA at 36).

# **Public Involvement and Scoping**

Public involvement began in 2013 when the Walla Walla Ranger District hosted the Umatilla Forest Collaborative Group (UFCG) on a field trip to the Thomas Creek project area. Public scoping for the Thomas Creek project began in March of 2014 when a description of the proposed action and request for public input was mailed to over 200 individuals, organizations, and agencies, and the project was first listed on the Umatilla National Forest's Quarterly Schedule of Proposed Actions (SOPA). The project has been published continually on the SOPA and on the Forest's website since the start of public scoping in 2014. The Walla Walla Ranger District received seven responses to public scoping, which were used to assist in identifying key issues associated with the proposed action. Letters received represented the UFCG, environmental groups, industry, and individuals. Full text of scoping input is located in the project file at the Walla Walla Ranger District office.

Using the comments from scoping with the public, other agencies, and organizations, the interdisciplinary team identified several issues regarding the effects of the proposed action. Main issues of concern included the abundance of trees over 150 years old, use of temporary roads and re-opening of closed roads, jobs and economics, restoration of RHCAs, and inclusion of a learning design. To address these issues, the Forest Service developed Alternatives C, D and E (EA at 13-35). A Legal Notice was published on July 16, 2015 in the *East Oregonian*, the exclusive newspaper of record for the Umatilla National Forest, informing the public of the availability of the preliminary environmental assessment for a 30 day notice and comment period.

The draft Decision Notice and FONSI were subject to objection pursuant to 36 CFR Part 218. On April 29, 2016, a Legal Notice announcing the Draft Decision Notice and FONSI was published in the *East Oregonian* and the 45-day objection period began. One objection was received from Blue Mountain Biodiversity Project (BMBP).

#### **Pre-Decisional Administrative Review**

This Project was subject to pre-decisional administration review (objection process) pursuant to 36 CFR §§ 218 Subpart B. One objection was received from Blue Mountain Biodiversity Project (BMBP) (#16-06-14-0002-218(B)) that met the requirements of 36 CFR §§ 218.5 for the Thomas Creek Project. I reviewed the objection letter and identified a total of 69 objection points. Copies of the objection are available in the project record. I considered each of these objections and provided responses to the Reviewing Officer, Forest Supervisor Genevieve Masters for her review.

I held several informal objection meetings with the Objector beginning June 30, 2016 in an effort to resolve the objection as permitted by 36 CFR § 218.11(a). After considering the information received during these discussions and to demonstrate my commitment towards resolving the objection, I voluntarily modified Alternative B to the terms specified in this Decision Notice (see pages 2-5). On August 3, 2016 negotiations with the Objector concluded when the objector agreed to terms reached during negotiation, reflected in Alternative B-Modified, and formally withdrew their objection. I believe the modifications made to Alternative B have sufficiently addressed the concerns raised in the objection.

As required by 36 CFR §§ 218.11(b) and 218.32(b), the Reviewing Officer sent written responses to the Objector on August 5, 2016 describing the results of her review of their objection with respect to the disclosures in the Final EA (Project Record). The review determined that the EA and the actions analyzed are consistent with all applicable laws, regulations, and policies (36 CFR § 218.8(d)(5)). I received a copy of the letter sent to the Objector on August 19, 2016.

# Finding of No Significant Impact

After considering the environmental effects described in the EA and the public input received during the project development, I have determined that the actions proposed in Alternative B-Modified will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. This determination is based on the site-specific environmental analysis documented in the EA and supporting documents found in the project record which describe direct, indirect, and cumulative impacts of this decision. I have found that the context of the environmental impacts of this decision is limited to the local area and is not significant. I have also determined the severity of these impacts (intensity) is not significant.

#### Context

The actions included in the Selected Action as modified are described in Chapter 2 of the EA. The disclosure of effects in Chapter 3 of the EA may differ by the resource and by the scale of analysis. Therefore, multiple scales and levels of analysis were used to determine the significance of the actions' effects on the human environment.

The Umatilla National Forest is 1.4 million acres. The Thomas Creek project area included approximately 15,800 acres. The Selected Alternative includes vegetation modification activities on about 2,421 acres (about 15 percent of the project area), and prescribed fire over about 6% of the project area (942 acres).

The entire Thomas Creek project area comprises approximately 1% of the Umatilla National Forest. The acres of vegetation modifying activities represent an even smaller percentage of the entire Forest. Therefore, I find that, in context, this project is local in scope.

# Intensity

The environmental effects of the following actions are documented in Chapter 3 of the Environmental Assessment: commercial and non-commercial harvest of trees, shelterwood and seedtree harvest; prescribed fire; temporary road construction and rehabilitation, temporary use of roads designated closed in the Access and Travel Management Plan; subsoiling; placement of large woody debris, and riparian planting. The beneficial and adverse direct, indirect, and cumulative impacts discussed in the EA have been disclosed within the appropriate context, and effects are expected to be low in intensity because of management requirements and project design features developed to protect or reduce impacts to resources. Significant effects to the human environment are not expected. The rationale for the determination of significance is based on the environmental assessment. I base my finding on the following:

- 1. My finding of no significant environmental effects is not biased by the beneficial effects of the action. The interdisciplinary team analyzed and disclosed the direct, indirect and cumulative effects of the actions on soils (EA at 55-60), hydrology (EA at 60-78), fisheries and aquatic habitat (EA at 78-103), forested vegetation (EA at 104-121), fuels and air quality (EA at 122-127 and 206), threatened endangered and sensitive plants (EA at 128-130), range (EA at 134-136) wildlife and wildlife habitat (EA at 137-180), recreation, visual resources and scenery (EA at 181-184), lands with wilderness characteristics and other undeveloped lands (EA at 124-126 and Appendices E and E-1), cultural resources (EA at 204), and economics (EA at 199-202). The direct, indirect, and cumulative effects of the Selected Alternative included the following:
  - Reduced stand density in moist upland forest and dry upland forest
  - In moist upland forest, move species composition towards RV values for western larch, Douglas-fir, and lodgepole pine
  - In dry upland forest move species composition towards RV values for western larch and ponderosa pine
  - Increase stand initiation and stem exclusion forest structural stages in moist upland forest
  - Increase stem exclusion forest structural state in dry upland forest
  - Improved fire regime condition class at the stand and landscape level
  - Improved in-stream habitat
  - · Increased forage habitat
  - Short-term increase in fine fuel loads
  - Compaction and mobilization of soil from mechanized harvest and temporary road construction
  - Short-term increase in exposed soil
  - Long-term reduction in detrimental soil condition
  - Short-term increased probability of noxious weed establishment and spread
  - Smoke emissions (greenhouse gas) from prescribed burning

Prescribed burning will be planned and conducted in compliance with air quality standards and the State of Oregon's Smoke Management Implementation Plan in order to reduce the effects of smoke on public health (EA at 126 and 206). At the project scale, and considering the lack of effects that can be meaningfully evaluated under current science, modeling, and policies I cannot discern

significant climate change effects of this project.

- 2. Public safety is of paramount importance in all our projects. Ensuring public safety with this specific project is done through Forest Plan Standards and Guidelines. For example: to reduce user conflict with management activities the access and travel management restrictions for timber sale contracts will be applicable during critical use periods. Advance notice to recreation sites prior to burning is required. As described above, smoke management considerations will be planned into all burning activities. With the Forest Plan Standards and Guidelines taken into consideration, the degree of risk to public safety from this project is a bit higher than in areas where no projects are taking place, but still very low when compared to normal recreational use of being out in the woods and driving on gravel and dirt roads.
- 3. There will be no significant effects on unique characteristics of the area, because there are no designated wilderness areas, wild and scenic rivers, or inventoried roadless areas within the project area boundary (EA at 124). The analysis in the EA at 190-193 and Appendix E also shows that there would be no effect to lands with wilderness characteristics. There would be no effect to floodplains or wetlands (EA at 208). There are no parklands or ecologically critical areas that could be affected by this action (EA at 209).
- 4. The effects on the quality of the human environment are not likely to be highly controversial because there is no known scientific controversy over the impacts of the project. The level of interest in what course of action to take regarding forest management (social controversy) is not the focus of this criterion, rather the focus is on the degree of scientific controversy over the effects of the proposed project.

No significant disagreements have been identified with the disclosure of effects in Chapter 3 of the EA. While some comments differed with my conclusion that the proposed action would affirmatively respond to the purpose and need, the reasons for this difference appear to be based on opinions, not scientific evidence related to effects.

Some commenters provided lists of citations they deemed as science, which they assert disputed the scientific reports that we considered and relied on to make a decision. We reviewed all submitted papers and citations (see project file response to comments). Some were editorials or opinion papers not documenting research and we determined are not the best available science. Lastly, some were scientific papers written on studies conducted in different climatic or geographic areas. Therefore the conclusions offered by these papers were not always relevant to the Blue Mountains and this project. I found the scientific literature that the Forest Service specialists used the best available and most applicable science.

The Umatilla National Forest Land and Resource Management Plan (Forest Plan) permits thinning, fuels reduction, and prescribed fire in this area, and these activities have been conducted in this general area previously. The EA effectively addressed and analyzed all major issues associated with the project in Chapter 3. During scoping and a 30-day public review of the EA and effects analysis, no scientific controversy over unacceptable effects was identified.

5. The effects on the quality of the human environment are not likely to be uncertain or involve unique or unknown risk because there is no known scientific controversy over the impacts of the project. The level of interest in what course of action to take regarding forest management (social controversy) is not the focus of this criterion, rather the focus is on the degree of scientific

controversy over the effects of the proposed project.

- 6. We have considerable experience with the types of activities that will be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk (EA, Chapter 3). The best available scientific information provided the foundation for designing the Thomas Creek roject. Thinning, harvest, road work, and prescribed fire have been implemented successfully on the Walla Walla Ranger District. These past activities have been monitored (analysis file) and the monitoring results provide a good baseline for predicting future outcomes. Recent monitoring has found that Best Management Practices for the protection of soil and water resources are effective in keeping detrimental impacts to within Forest Plan standards. I am satisfied that the project, as designed, and the effects disclosed in the EA present no highly uncertain or unknown risks.
- 7. The action is not likely to establish a precedent for future actions with significant effects, because harvest is not a new activity within this analysis area and the proposed prescribed burning and mechnical treatment of natural and activity fuels has occurred in numerous parts of the Umatilla National Forest. Harvest, thinning, and prescribed burning are allowed in this area by the Forest Plan. The EA effectively addressed and analyzed all site-specific major issues associated with the project. Based on this information, implementing the Thomas Creek project decision will not set precedent for future actions with significant effects.
- 8. The cumulative impacts are not significant (EA Chapter 3). The EA discloses the projected cumulative effects of implementing the Thomas Creek project. The list of past, present, and reasonably foreseeable future activities in the area that were considered for the cumulative effects analysis for each resource topic is located in Chapter 3 of the EA on pages 51-53 and in Appendix G. I recognize some cumulative effects will occur; however, these cumulative effects are not considered to be significant at the scale and time frame addressed by this analysis and decision. The action will have no significant effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because the project area has been inventoried for such properties and no properties were located within the proposed treatment units (EA at 205). The action will also not cause loss or destruction of significant scientific, cultural, or historical resources, because the project area has been inventoried for these resources and no such properties were located within the proposed treatment units (EA at 205). Any cultural or historic resources discovered during the project will be avoided. The Forest has complied with Section 106 of the National Historic Preservation Act for the Thomas Creek project (EA at 205).
- 9. The action may affect, but is not likely to adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973. Biological Evaluations have been completed for aquatic, terrestrial wildlife and botanical species (analysis file). Harvest, thinning, fuel reduction, prescribed burning, and temporary road construction and road use may affect, [but are] not likely to adversely affect the threatened Snake River Basin Steelhead and its designated critical habitat. A Biological Assessment has been submitted to the National Marine Fisheries Service. A letter of concurrence dated August 29, 2016 (NMFS reference WCR-2016-5355) was received from the National Marine Fisheries Service for this project. Harvest, thinning, fuels treatments, and road work would have no impact on any other threatened, or endangered species expected to occur on the Umatilla National Forest (EA at 103). For Essential Fish Habitat (EFH) under the Magnuson Stevens Act, the action listed above "Will

Not Adversely Affect" EFH for Pacific salmon in the project area.

Instream restoration actions (placement of large woody debris) are determined to be Likely to Adversely Affect for Snake River Basin Steelhead and their Designated Critical Habitat and May Adversely Affect Essential Fish Habitat for salmon. The adverse effects associated with the instream project will be short-term in duration. Those effects will be minimized through the implementation of project design criteria, BMP monitoring and compliance with Terms and Conditions of an existing programmatic aquatic restoration Biological Opinion, and would ultimately provide long-term habitat benefits to EFH.

10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA at 205-209. The action is consistent with the Umatilla National Forest Land and Resource Management Plan (EA at 209-212).

#### Conclusion

After considering the environmental effects described in the EA and specialist reports, I have determined that my decision (Alternative B-Modified) will not have significant effects on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

# Findings Required by Other Laws and Regulations

Information regarding compliance with applicable laws and regulations is found in the EA at 205-209.

National Historic Preservation Act

This project is in compliance with the Section 106 of the National Historic Preservation Act (EA at 205).

Clean Water Act

By implementing any of the action Alternatives including best management practices, project design elements, and continued monitoring the Thomas Creek project would be in compliance with the Clean Water Act and the Forest Plan (EA at 206 and 210).

#### Clean Air Act

This project would comply with the requirements of the Clean Air Act and be conducted in accordance with the operational guidelines agreed to by the Forest Service and the Oregon Department of Environmental Quality (EA at 206).

Executive Order 13186: Neotropical Migratory Birds

Activities under all action Alternatives would be designed using the Conservation Strategy for Landbirds in the Northern Rocky Mountains of Eastern Oregon and Washington (Altman 2000), and therefore would be consistent with Executive Order 13186 (EA at 207).

Executive Order 11988 and 11990: Floodplains and Wetlands

Executive Order (EO) 11990 requires the Forest Service to "avoid to the extent possible the long and short term adverse impacts associated with the ... destruction or modification of wetlands." The Thomas Creek project is consistent with this EO because it does not propose to destroy or modify any wetland (EA at 208).

Executive Order 12898: Environmental Justice

With implementation of the Proposed Action or any of its Alternatives there would be no disproportionately high and adverse human health or environmental effects on minority or low-income populations (EA at 208).

EO 13175: Consultation and Coordination with Indian Tribal Governments

Consultation and Coordination was conducted with the affected tribes (see EA at 10-11 and 205).

Inventoried Roadless Areas, Wilderness, Potential Wilderness Areas, and Wild and Scenic Rivers

There are no inventoried roadless areas or wilderness within the project area. The analysis of potential wilderness areas shows that no activities would occur in any PWA. There are no wild and scenic rivers within the project area (EA at 206).

# NFMA and Forest Plan Consistency

This decision to move the landscape towards desired conditions and RV, using vegetation treatments such as timber harvest and non-commercial thinning and prescribed fire, is consistent with the intent of the Forest Plan's long term goals and objectives (Forest Plan, at 4-1 through 4-3 and 4-15 through 4-46). The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines for soils, wildlife habitat, riparian and fisheries habitat, vegetation, water, fuels, air quality, pest management, threatened, endangered, and sensitive species, visual resources, and management area guidelines (Forest Plan at 4-47 through 4-195).

My decision on this project is based on a review of the record that shows consideration of relevant scientific information, best available science, including responsible opposing views, and as appropriate, the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk. My decision implements the Umatilla National Forest Plan. As required by NFMA Section 1604(i), I find this project to be consistent with the Forest Plan (EA at 209-211). See also EA pages 208-209 for NFMA consistency.

# **Implementation Date**

The Thomas Creek Restoration Project may be implemented immediately upon my issuance of the final Decision Notice and FONSI. I have reviewed the Thomas Creek Restoration Project EA and associated documents and believe there is adequate information within these documents to provide a reasoned choice of action. I will notify interested or affected parties of the availability of this Decision Notice as soon as practical after signing (36 CFR § 220.5(g)).

# **Contact Person**

For additional information concerning this Decision Notice and FONSI or the USDA Forest Service administrative review/objection process, contact Deanna Engelmann, Walla Walla Ranger District, Umatilla National Forest, 1415 W. Rose St, Walla Walla, WA 99362, 509-522-6054.

MICHAEL L. RASSBACH

Walla Walla District Ranger Umatilla National Forest September 01, 2016

Date

Attachment 1: Alternative B-Modified (Selected Action Map)

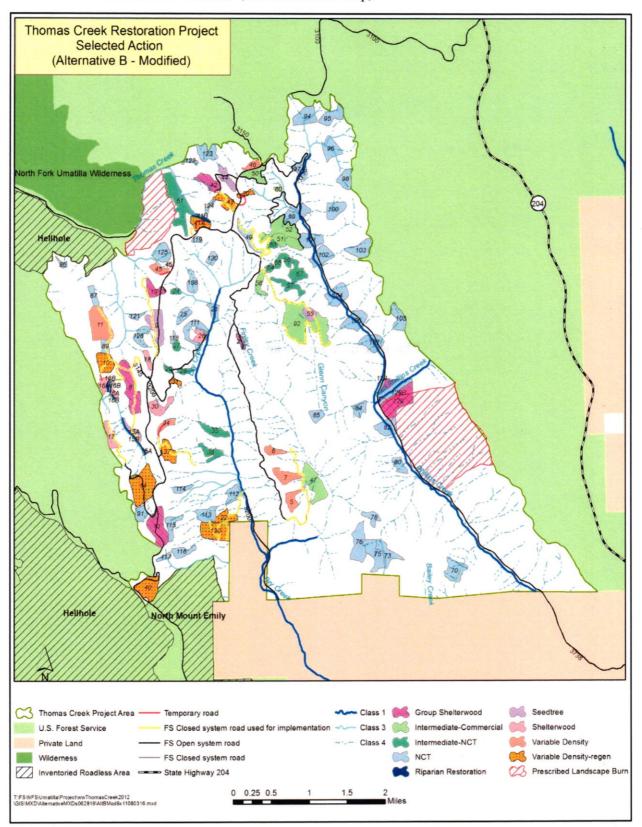
Attachment 2: Silvicultural Prescription Information Common to Riparian Habitat Conservation Areas (RHCAs) document

Attachment 3: Unit 16A and 16B Modified

Thomas Creek Restoration Project

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Attachment 1: Alternative B-Modified (Selected Action Map)



Thomas Creek Restoration Project

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Attachment 2: Silvicultural Prescription Information Common to Riparian Habitat Conservation Areas (RHCAs)

# Thomas Creek Restoration Project

# Silvicultural prescription information common to Riparian Habitat Conservation Areas (RHCAs)

# **RHCA Identification**

The Thomas Creek Restoration Project includes commercial treatments in stream classes III and IV in multiple units and various prescriptions across the project area. This RHCA prescription information is applicable for all units designated through the Thomas Creek Restoration Project Environmental Assessment (TCRP-EA). RHCAs will be identified through a combination of mapped streams and on the ground unit layout and stream location.

# General RHCA Description

Past management in all RHCAs in TCRP designated for commercial harvest (Seedtree, Shelterwood, Group Shelterwood, Variable Density- Regeneration) or Variable Density thinning was a clear cut between 1958 and 1962, burning, and planting of ecologically off-site ponderosa pine (*Pinus ponderosa*). This pine is low in vigor with many closely spaces branch whorls and many have broken tops. Foliage appears discolored every year and crown rations are low. Down wood and snags are not abundant in these stands. Other conifer species present in the stands include western larch (*Larix occidentalis*), Douglas-fir (*Pseudotsuga menziesii*), lodgepole pine (*Pinus contorta*), Engelmann spruce (*Picea* engelmannii), grand fir (*Abies grandis*), and in some units subalpine fir (*Abies lasiocarpa*), and Pacific Yew (*Taxus brevifolia*).

The RHCAs can be categorized as Moist Upland Forest Potential vegetation group (PVG) (Powell 2007).

These RHCAs include young trees (less than 58 years old), in even-aged stands which could be structurally classified as stem exclusion. There are few (less than 1 trees per acre (tpa)) to no trees larger than 21" diameter at breast height (dbh) with the stand.

Basal areas in RHCAs range from approximately 150 to 250 ft²/acre (BA) with an average of BA of about 180 ft²/acre, and average number of trees per acre of approximately 130 and a quadratic mean diameter (QMD) of about 16" dbh. Based on an example stocking level in the ABGR/CLUN (Grand fir/beadlily) plant association, the RHCAs are above the upper level management zone.

#### RHCA Management Objectives

Management goals for RHCAs are determined by the desired future conditions described in the Forest Plan and the purpose and need within the Thomas Creek Restoration Project. The long term goal for these RHCAs is to maintain and restore diversity and productivity of plant communities to attain PACFISH Riparian Management Objectives (RMOs). This includes actions to:

- Improve landscape resiliency and restore functions and processes in upland forest by moving the landscape's vegetation toward Range of Variation (RV) in forest structure, density, and species composition.
- Restore Riparian Habitat Conservation Areas (RHCA's) altered by past timber harvest and off-site
  planting by managing towards PACFISH Riparian Management Objectives.

- Restore native vegetation diversity in riparian areas for the long term by
  - Removal of off-site ponderosa pine within the RHCA;
  - Regeneration of site-appropriate native hardwood and conifer species;
  - Planting of local native conifers and hardwoods where appropriate;
  - Decrease density in riparian areas to meet restoration objectives;
  - Ameliorate detrimental soil conditions;
  - Improving pool frequency, large woody debris, width/depth ratios and water temperature through:
    - · Placement of large woody debris in streams;
    - Planting or otherwise encouraging growth of stream shading vegetation in those areas; where it has been reduced by past activities.

# RHCA Design Criteria

#### In All Units:

- No trees greater than 17 inches DBH would be cut or removed unless they posed a safety risk to
  operators.
- No snags greater than 12 inches DBH will be removed unless they are a hazard to workers.
- · Retain all down wood.
- Harvest trails which might cross the ephemeral channel or the grassy swale would be approved before use and no crossings would be made when either is wet.
- Neither the ephemeral channel nor the grassy swale would be used as a skid or forwarder trail.
- Skips (in Variable Density and Variable Density Regeneration stands) or retention trees (all other Rxs) should anchor to and include RHCAs or other natural features whenever possible.

# Class III RHCAs

In **Class III RHCAs** specifically, upland silvicultural prescriptions would be applied to move the RHCAs toward a more resilient state along with all other RMOs. To meet these objectives the following design criteria are included.

Class III RHCA Treatment Zone Width (ft)	Class III RHCA Design Criteria
0 -15	No treatment
15 - 35	Hand treat (non-commercial) trees < 20' in height. Retain trees at densities within management zone (Powell 1999).
35 - 75	Hand cut and cable yard or skyline (commercial) trees < 60' in height and < 17" dbh. Retain at least 16 tpa (about 30 ft² BA/ac or a 50 ft spacing) within the RHCA.
75 – 150	Hand cut and ground base or skyline trees < 17" dbh. Retain at least 16 tpa (about 30 ft² BA/ac or a 50 ft spacing) within the RHCA.

#### Class IV RHCAs

Class IV RHCA Treatment Zone Width (ft)	Class IV RHCA Design Criteria
Inner Gorge or 15 feet (whichever is greater)	No treatment
15 or inner gorge -75	Hand cut and cable yard or skyline (commercial) trees < 17" dbh. Retain at least 16 tpa (about 30 ft² BA/ac or a 50 ft spacing) within the RHCA.
75-100	Hand cut and ground base or skyline trees < 17" dbh. Retain at least 16 tpa (about 30 ft² BA/ac or a 50 ft spacing) within the RHCA.

#### Post Treatment RHCA Description

After prescription implementation in commercial units with RHCAs the RHCA (all classes) will have a higher density than the surrounding stand, especially in regeneration harvests (Seedtree, Shelterwood, Group Shelterwood, and Variable Density Regeneration). Resilient conifer species will have been retained preferentially within RHCAs including western larch, Douglas-fir, and all other conifer species with the exception of off-site ponderosa pine, but many off-site ponderosa pine trees will remain within RHCAs that are greater than 17" dbh or that would not be removed to do logging systems limitations. Density will be highest near perennial and ephemeral stream channels. Retention trees and skips will be anchored around RHCAs. Density in RHCAs will be at least an average of 16 tpa in the most outer zone and retention will increase as you move toward the stream channel as design criteria are implemented and the limitations of logging systems. Projected post- harvest QMD will be about 18" dbh. Post-harvest TPA would range from between 180 to 16 depending on distance from stream channel, and Basal Area will be about 30 ft²/ac.

Horizontal spatial heterogeneity of the RHCA will likely be increased slightly though tree designation techniques focused primarily on species and size selection. "Skips" will be evident in the RHCAs and "Gaps" will not be evident in RHCAs. Vertical canopy structure in RHCAs will be maintained in the short term as most trees removed will be small and in-effect a "thinning from below" will be implemented. In the midterm, a new cohort of conifers will establish where lower densities allow light to the forest floor, increasing species diversity in the RHCA in the long term.

Species composition in the stand will shift away from less resilient species such as off-site ponderosa pine toward western larch, Douglas-fir, grand fir, lodgepole pine, and Engelmann spruce. Planting of conifers may occur to meet RHCA objectives for species composition.

# Long Term Desired Condition

These prescribed RHCA commercial entries are designed to move species composition toward more site appropriate and resilient species in addition to reducing density. The long term goal for these RHCAs is to maintain and restore diversity and productivity of plant communities to attain Riparian Management Objectives (RMOs).

Over the next 50 to 150 years, the largest retained trees should continue to be cultured, snag and down wood development and subsequent large wood development in streams should also continue. Post entry regeneration may be cultured within the next 30 years to modify species composition, density, or structural trajectory. The RHCA will move through stem exclusion stage into understory re-initiation and into old forest structures, contributing to RMOs along its development.

Prescri	iption	prep	pared	by
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_/s/		
Carrie E. Spradlin	Forester	August 1, 2016
Name	Title	Date

# References

**Powell, D.C. 1999.** Suggested stocking levels for forest stands in northeastern Oregon and southeastern Washington: an implementation guide for the Umatilla National Forest. Technical Publication F14-SO-TP-03-99. Pendleton, OR: U.S. Department of Agriculture, Forest Service, Umatilla National Forest.

Powell, D.C.; Johnson, C.G. Jr.; Crowe, E.A.; Wells, A.; Swanson, D.K. 2007. Potential Vegetation Hierarchy for the Blue Mountains Section of Northeastern Oregon, Southeastern Washington and West-Central Idaho.

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Attachment 3: Unit 16A and 16B Modified

